UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

3746

DATE MAILED: 01/27/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

23557 7590 0J27/2010 SALIWANCHIK LLOYD & SALIWANCHIK A PROFESSIONAL ASSOCIATION PO Box 142950

GAINESVILLE FL 32614

EXAMINER
BERTHEAUD, PETER JOHN
ART UNIT PAPER NUMBER

APELICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONTRIBUTION NO.

10/576/780 04/21/2006 Peter Ryser R.C.101T 5873

TITLE OF INVENTION: LIQUID DEUVERY MICROPPUMP

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/27/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed of	for transmitting the IS ng the Patent, advance herwise in Block 1, by	orders and publication of (a) specifying a new con	TION PEE (if rec f maintenance fees respondence addres	will be s; and/o	mailed to the current or (b) indicating a sepa	nould be completed where correspondence address as trate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Bi	lock 1 for any change of addres					r domestic mailings of the or any other accompanying nt or formal drawing, must
A PROFESSION PO Box 142950	IK LLOYD & SA NAL ASSOCIATIO		1	C bereby certify that	ertificat	e of Mailing or Trans	
GAINESVILLE	, FL 32614						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR	ATTO	ORNEY DOCKET NO.	CONFIRMATION NO.
10/576,780 TITLE OF INVENTION	04/21/2006 : LIQUID DRUG DELI	VERY MICROPUMP	Peter Ryser			R.C.101T	5873
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISS	UE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	04/27/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	7			
BERTHEAUD,	PETER JOHN	3746	417-462000	_			
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT. less an assignee is ident h in 37 CFR 3.11. Comj	inge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED O	registered attorney c 2 registered patent a listed, no name will THE PATENT (print or	to 3 registered pat attively, agle firm (having as or agent) and the na attorneys or agents! be printed. type) patent. If an assignan assignment.	a memi mes of u f no nar	ber a 2 up to a 3	ocument has been filed for
Please check the appropriate. 4a. The following fee(s): Issue Fee Publication Fee (N			4b. Payment of Fee(s): (P A check is enclosed Payment by credit	lease first reapply d. card. Form PTO-20	any pre	viously paid issue fee	
Advance Order -	# of Copies		The Director is here overpayment, to Do	eby authorized to che posit Account Num	arge the ber	required fee(s), any de (enclose a	ficiency, or credit any n extra copy of this form).
	s SMALL ENTITY state	us. See 37 CFR 1.27.	b. Applicant is no I				
NOTE: The Issue Fee and interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accep ites Patent and Tradema	ted from anyone other tha irk Office.	n the applicant; a re	gistered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration			
This collection of inform an application. Confident submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this bu firginia 22313-1450. DC 13-1450.	CFR 1.311. The information of U.S.C. 122 and 37 CFe USPTO. Time will varden, should be sent to D NOT SEND FEES OF	tion is required to obtain of R 1.14. This collection is ry depending upon the in the Chief Information Off R COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any ficer, U.S. Patent an TO THIS ADDRE	the pub 2 minute commen d Trader SS. SEN	olic which is to file (and is to complete, including its on the amount of tir mark Office, U.S. Dep ID TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/576,780	04/21/2006	Peter Ryser	R.C.101T	5873	
23557 75	90 01/27/2010	EXAMINER			
SALIWANCHIK	LLOYD & SALIW	BERTHEAUD, PETER JOHN			
	L ASSOCIATION	ART UNIT	PAPER NUMBER		
PO Box 142950 GAINESVILLE, FL 32614			3746 DATE MAII ED: 01/27/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 805 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 805 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/576,780 RYSER ET AL. Notice of Allowability Examiner Art Unit PETER J. BERTHEAUD 3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to response to election/restriction filed 9/30/2009.
- 2. The allowed claim(s) is/are 1-17.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the: a) X All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date 4/21/06, 12/22/09
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other ____.

/Devon C Kramer/

Supervisory Patent Examiner, Art Unit 3746

Application/Control Number: 10/576,780 Page 2

Art Unit: 3746

EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

 Authorization for this examiner's amendment was given in a telephone interview with Chris Eisenschenk on 1/12/2009.

The Specification has been amended as follows:

The following headings have been inserted into the Specification in the positions described below:

Field of the Invention; placed prior to the first paragraph on page 1 (line 2).

Background of Invention; placed prior to second paragraph on page 1 (line 6).

<u>Brief Summary of the Invention</u>; placed prior to third paragraph on page 2 (line 18).

<u>Brief Description of the Drawings</u>; placed prior to Figure descriptions on page 6 (line 8).

<u>Detailed Description of the Invention</u>; placed after Figure descriptions on page 7 (line 12).

<u>Claims</u>; placed after the last paragraph on page 13 (line 28) and prior to the claims.

The claims have been amended as follows:

Claim 1 has been amended to now read:

1. A pump system for the pumping of a liquid, having a pump module comprising:

Application/Control Number: 10/576,780

Art Unit: 3746

a stator housing with a chamber,

a rotor rotatably and axially slidably received in the chamber and having comprising a first axial extension having comprising a liquid supply channel and a second axial extension comprising a liquid supply channel, the first and second axial extensions having different diameters, and

first and second sealing rings, mounted around the first and second axial extensions. extensions.

said liquid supply channel of each axial extension in conjunction with the corresponding sealing ring forming a valve that opens an closes as a function of the angular and axial displacement of the rotor.

Claim 9 has been amended to now read:

9. The pump system according to claim 1, further comprising a reservoir 40 containing a supply of liquid, the pump module being assembled to the reservoir and having an inlet in liquid communication with the reservoir.

Allowable Subject Matter

Claims 1-17 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art does not teach or disclose a rotor rotatably and axially slidably received in a chamber and comprising a first axial extension comprising a liquid supply channel and a second axial extension comprising a liquid supply channel, the first and second axial extensions having different diameters, and first and second sealing rings, mounted around the first

Application/Control Number: 10/576,780 Page 4

Art Unit: 3746

and second axial extensions, said liquid supply channel of each axial extension in conjunction with the corresponding sealing ring forming a valve that opens an closes as a function of the angular and axial displacement of the rotor.

4. It is noted by the examiner, and stated here for the record of prosecution, that the aspect of the instant invention determined to be novel and patentably distinct from the prior art is the axial extensions comprising liquid supply channels that act as valves when combined with the sealing rings. This limitation in combination with the rotor being both angularly and axially displaced in order to pump the fluid makes the claim read over the prior art.

Conclusion

- The prior art made of record in the attached form 892 and not relied upon is considered pertinent to applicant's disclosure.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER J. BERTHEAUD whose telephone number is (571)272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/ Supervisory Patent Examiner, Art Unit 3746

PJB /Peter J Bertheaud/ Examiner, Art Unit 3746